Vienna Instruments
Solo Download Instruments
Bass Trombone
Full Library

Contents

Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments Bass Trombone. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

"Full" Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will be different than those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content. The list of articulations further down which gives a summary of the Library's contents.

Special Patch configurations which sometimes are part of a Standard Download Instrument may be found in a reserved folder called "98 RESOURCES" in the Full Instrument. E.g., Flute 1 Standard contains the Patch "22D FL1 legato-sus"; in Flute 1 Full, this Patch is called "01 FL1_perf_leg_sustain" and is located in the Resources' subfolder "03 Perf Speed variation". (Apart from that, it also contains more samples.) Other articulations that can be found in the Resources folder are isolated dynamics repetitions in the subfolder "01 Perf Rep dyn" – e.g., the five repetitions of a legato crescendo, divided into separate Patches – and extracted velocity layers of sustained notes in the subfolder "02 Long Notes – Single Layer".

Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

Major and minor runs are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109-127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But of course, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

Note: the Vienna Instruments PRO player software also allows you to play polyphonic Interval performances.

Another variety of interval performance you will come across is the "perf-leg_sus" Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different "e" tones; with sus-legato you won't.

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

A/B switching normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Speed controller switches naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

Abbreviations

Here's a list of abbreviations in Patch names, which will help you to determine a Patch's content even without the help of the Vienna Instruments browser. Please note that not all of the abbreviations may occur in the manual on hand.

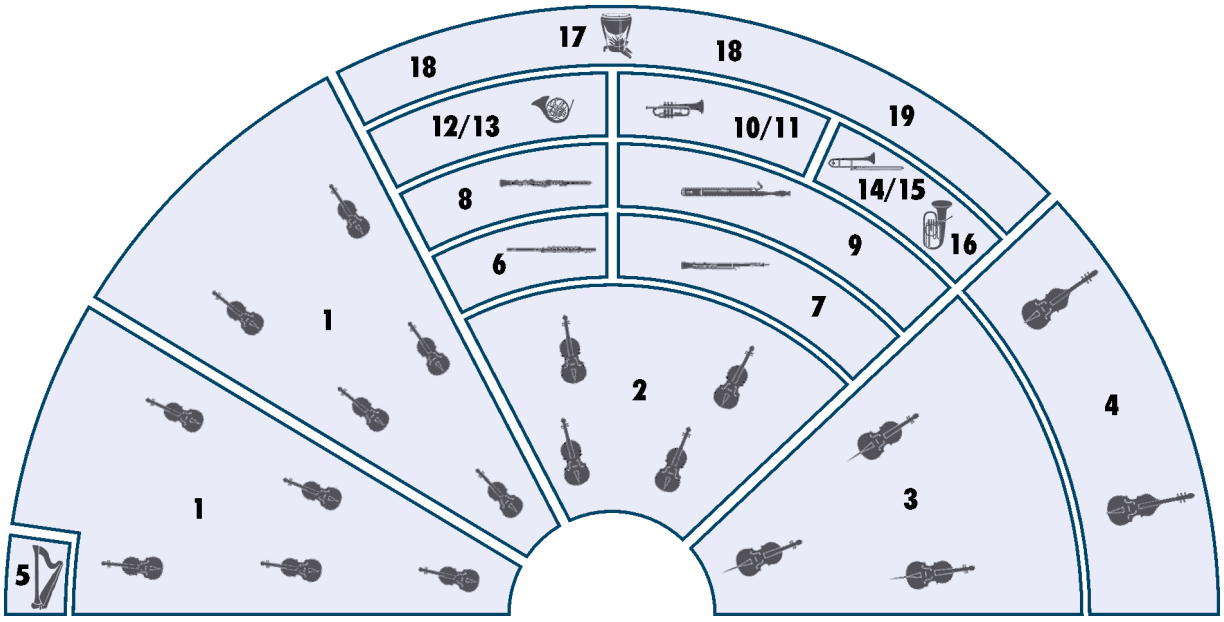
Abbreviation	Meaning	Abbreviation	Meaning
+	faster articulation (runs and arpeggios)	lo	long
		ma	major
150, 160, …	150, 160, … BPM (beats per minute)	marc	marcato
1s, 2s, …	tone length 1 sec., 2 sec., …	me	medium
acc	accelerando	mi	minor
all	combination of all Patches of a category	mord	mordent
		mu	muted
arp	arpeggio	muA, muB	muted, variation A/B
blare	"blared" tones (horn)	nA	normal attack
cre	crescendo	noVib	without vibrato
dim	diminuendo	perf-rep	repetition performance
dm	diminished (arpeggios)	por	portato
dyn	dynamics (crescendo and diminuendo)	run	octave run
		sA	soft attack
dyn5, dyn9	dynamics, 5/9 repetitions	sl	slow
fa	fast	sta, stac	staccato
faT	fast triplets	sto	stopped (horns)
fA	fast attack	str	strong
fA_auto	attack automation (normal/fast attack)	sus	sustained
		T	triplets
fast-rep	fast repetitions	tune	"tuning in" articulation
flatter	flutter tonguing	UB	upbeat
fx	effect sound	UB-a1, -a2	1, 2 upbeats
gliss	glissando	v1, v2 …	1st, 2nd, … variation
hA	hard attack	Vib	with (medium) vibrato
leg	legato	Vib-progr	progressive vibrato
li	light	XF	cell crossfade Matrix

Articulations

57 Bass trombone	
01 SHORT + LONG NOTES	Staccato Portato short Portato medium, normal and soft attack, and marcato Portato long, with and without vibrato, with soft attack, and marcato Sustained with and without vibrato
02 DYNAMICS	Light crescendo and diminuendo, 1.5, and 2 sec. Medium crescendo and diminuendo, 1.5, 2, 3, and 4 sec. Strong crescendo and diminuendo, 4 and 6 sec. Fortepiano, sforzato, sforzatissimo
03 FLATTER	Flutter tonguing normal and crescendo
10 PERF INTERVAL	Legato, normal and withsustain crossfading Marcato
11 PERF INTERVAL FAST	Legato
12 PERF REPETITION	Staccato slow and fast Portato Dynamics for all repetitions
13 FAST REPETITION	Staccato, 9 repetitions, 150 to 190 BPM Normal and dynamics
14 UPBEAT REPETITION	1–3 upbeats, 80–150 BPM
15 GRACE NOTES	Grace notes, minor and major 2nd, up and down

The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.



1 1st and 2nd violin
2 Viola
3 Cello
4 Double bass
5 Harp
6 Concert flute, piccolo
7 Oboe, English horn
8 Clarinet, bass clarinet
9 Bassoon, contrabassoon
10/11 Trumpet
12/13 Horn
14/15 Trombone
16 Tuba
17 Timpani
18 Drums, cymbals
19 other percussion instruments

Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

57 Bass trombone

The instrument

Description

From the middle of the 19th century the tenor-bass trombone, having “all round qualities”, replaced the bass trombone in orchestras and has been used as the third trombone ever since. In spite of the tenor-bass trombone’s wide range, a distinction has been made in recent times between the tenor-bass and bass trombone – both have the same length of tubing, but the bass trombone has a wider bore (from 13.8 mm), a wider bell (from 24.8 cm), an additional valve (either Eb or D) and a larger mouthpiece.

Range and notation

The bass trombone has a range of Bb0–F5. Notation in the tenor and bass clefs, no transposition. All three trombone parts are usually written in tenor clef for the upper register and in bass clef for the lower.

Sound characteristics

Brassy, powerful, overpowering, solid, tense, penetrating, dramatic, hard, full, sinister, soft, round.

In general the slightly wider bore of the bass trombone lends it a somewhat darker timbre and fuller sound. Especially the low notes have a powerful metallic sound, sforzando tones are easily executable. The highest notes are somewhat harder to play than on the tenor trombone.

Combination with other instruments

The bass trombone is notated as the 3rd trombone in orchestral scores and often plays the tenor trombone’s lower octave or the contrabass trombone’s upper octave. Its sound is effective in multiple octave combinations as well as the fundamental bass. Since it shares its dark timbre with the cello, the double-bass, the bassoon and the contrabassoon it combines well with those instruments. The bass trombone is the carrying instrument, however, the bassoon or cello merely add color.

Patches

01 SHORT + LONG NOTES — Range: C1–E4

01 BTB_staccato — **Samples: 296** — **RAM: 18 MB**

Staccato
4 velocity layers
4 Alternations

02 BTB_portato_short — **Samples: 296** — **RAM: 18 MB**

Portato, short
4 velocity layers
4 Alternations

03 BTB_portato_medium — **Samples: 295** — **RAM: 18 MB**

Portato, medium
4 velocity layers
4 Alternations

04 BTB_portato_medium_soft — **Samples: 296** — **RAM: 18 MB**

Portato, medium, soft attack
4 velocity layers
4 Alternations

05 BTB_portato_medium_marc — **Samples: 222** — **RAM: 13 MB**

Portato, medium, marcato
3 velocity layers
4 Alternations

06 BTB_portato_long_Vib — **Samples: 259** — **RAM: 16 MB**

Portato, long, with vibrato
4 velocity layers
Release samples
2 Alternations

07 BTB_portato_long_noVib — **Samples: 259** — **RAM: 16 MB**

Portato, long, without vibrato
4 velocity layers
Release samples
2 Alternations

08 BTB_portato_long_soft — **Samples: 259** — **RAM: 16 MB**

Portato, long, soft attack
4 velocity layers
Release samples
2 Alternations

09 BTB_portato_long_marc **Samples: 185** **RAM: 11 MB**

Portato, long, marcato
3 velocity layers
Release samples
2 Alternations

11 BTB_sus_Vib **Samples: 222** **RAM: 13 MB**

Sustained, with vibrato
3 velocity layers
Release samples

12 BTB_sus_noVib **Samples: 296** **RAM: 18 MB**

Sustained, without vibrato
5 velocity layers
Release samples

02 DYNAMICS Range: C1–E4

01 BTB_dyn-li_1'5s **Samples: 222** **RAM: 13 MB**

Light crescendo and diminuendo, 1.5 sec.
3 velocity layers
AB switch: crescendo/diminuendo

02 BTB_dyn-li_2s **Samples: 222** **RAM: 13 MB**

Light crescendo and diminuendo, 2 sec.
3 velocity layers
AB switch: crescendo/diminuendo

11 BTB_dyn-me_2s **Samples: 148** **RAM: 9 MB**

Medium crescendo and diminuendo, 2 sec.
2 velocity layers
AB switch: crescendo/diminuendo

12 BTB_dyn-me_3s **Samples: 148** **RAM: 9 MB**

Medium crescendo and diminuendo, 3 sec.
2 velocity layers
AB switch: crescendo/diminuendo

13 BTB_dyn-me_4s **Samples: 148** **RAM: 9 MB**

Medium crescendo and diminuendo, 4 sec.
2 velocity layers
AB switch: crescendo/diminuendo

21 BTB_dyn-str_4s **Samples: 74** **RAM: 4 MB**

Strong crescendo and diminuendo, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

22 BTB_dyn-str_6s **Samples: 74** **RAM: 4 MB**

Strong crescendo and diminuendo, 6 sec.
1 velocity layer
AB switch: crescendo/diminuendo

31 BTB_fp **Samples: 37** **RAM: 2 MB**

Fortepiano
1 velocity layer

32 BTB_sfz **Samples: 37** **RAM: 2 MB**

Sforzato
1 velocity layer

33 BTB_sffz **Samples: 37** **RAM: 2 MB**

Sforzatissimo
1 velocity layer

03 FLATTER Range: C2–E4

01 BTB_flatter **Samples: 100** **RAM: 6 MB**

Flutter tonguing
2 velocity layers
Release samples

02 BTB_flatter_cre **Samples: 25** **RAM: 1 MB**

Flutter tonguing, crescendo
1 velocity layer

10 PERF INTERVAL Range: C1–E4

01 BTB_perf-legato **Samples: 892** **RAM: 55 MB**

Legato
2 velocity layers
Release samples

02 BTB_perf-legato_sus **Samples: 1003** **RAM: 62 MB**

Legato with sustain crossfading
2 velocity layers
Release samples

03 BTB_perf-marcato **Samples: 873** **RAM: 54 MB**

Marcato
2 velocity layers
Release samples

11 PERF INTERVAL FAST — Range: C1–E4

01 BTB_perf-legato_fa — **Samples: 1038** **RAM: 64 MB**

Legato, fast
2 velocity layers
Release samples

12 PERF REPETITION — Range: C1–E4

01 BTB_perf-rep_por — **Samples: 513** **RAM: 32 MB**

Repetition performances: Portato
3 velocity layers

02 BTB_perf-rep_sta-sl — **Samples: 513** **RAM: 32 MB**

Repetition performances: Staccato, slow
3 velocity layers

03 BTB_perf-rep_sta-fa — **Samples: 513** **RAM: 32 MB**

Repetition performances: Staccato, fast
3 velocity layers

11 BTB_perf-rep_dyn9_por — **Samples: 342** **RAM: 21 MB**

Repetition performances: Portato dynamics, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

12 BTB_perf-rep_dyn9_sta-sl — **Samples: 342** **RAM: 21 MB**

Repetition performances: Staccato dynamics, slow, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

13 BTB_perf-rep_dyn9_sta-fa — **Samples: 342** **RAM: 21 MB**

Repetition performances: Staccato dynamics, fast, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

13 FAST REPETITION — Range: C1–E4

01 BTB_fast-rep_150 (160/170/180/190) — **Samples: 222** — **RAM: 13 MB**

Fast repetitions: 150–190 BPM
3 velocity layers
Release samples

11 BTB_fast-rep_150_dyn (160/170/180/190) — **Samples: 74** — **RAM: 4 MB**

Fast repetitions: Dynamics, 150–190 BPM
1 velocity layer
AB switch: crescendo/diminuendo

14 UPBEAT REPETITION

A Single Upbeat — Range: C1–E4

01 BTB_UB-a1_80 (90/100/110/120/130/140/150) — **Samples: 111** — **RAM: 6 MB**

1 upbeat, 80–150 BPM
3 velocity layers

B Double Upbeats — Range: C1–E4

01 BTB_UB-a2_80 (90/100/110/120/130/140/150) — **Samples: 111** — **RAM: 6 MB**

2 upbeats, 80–150 BPM
3 velocity layers

C Triple Upbeats — Range: C1–E4

01 BTB_UB-a3_80 (90/100/110/120/130/140/150) — **Samples: 111** — **RAM: 6 MB**

3 upbeats, 80–150 BPM
3 velocity layers

15 GRACE NOTES — Range: C1–E4

01 BTB_grace-1 — **Samples: 329** — **RAM: 20 MB**

Grace notes, minor 2nd
3 velocity layers
Release samples
AB switch: up/down

02 BTB_grace-2 — **Samples: 327** — **RAM: 20 MB**

Grace notes, major 2nd
3 velocity layers
Release samples
AB switch: up/down

98 RESOURCES

Isolated dynamics repetitions: Portato, staccato
Single layer long notes
Legato performance variation

01 Perf Rep dyn — Range: C1–E4

01 BTB_rep_cre9_por-1 (2/3/4/5/6/7/8/9) — **Samples: 19** — **RAM: 1 MB**

Extracted repetitions: Portato, crescendo, 1st to 9th note
1 velocity layer

01 BTB_rep_dim9_por-1 (2/3/4/5/6/7/8/9) — **Samples: 19** — **RAM: 1 MB**

Extracted repetitions: Portato, diminuendo, 1st to 9th note
1 velocity layer

02 BTB_rep_cre9_sta-1 (2/3/4/5/6/7/8/9) — **Samples: 19** — **RAM: 1 MB**

Extracted repetitions: Staccato, crescendo, 1st to 9th note
1 velocity layer

02 BTB_rep_dim9_sta-1 (2/3/4/5/6/7/8/9) — **Samples: 19** — **RAM: 1 MB**

Extracted repetitions: Staccato, diminuendo, 1st to 9th note
1 velocity layer

02 Long Notes - Single Layer — Range: C1–E4

01 BTB_sus_p — **Samples: 74** — **RAM: 4 MB**

Sustained, piano
1 velocity layer
Release samples

02 BTB_sus_mp — **Samples: 74** — **RAM: 4 MB**

Sustained, mezzopiano
1 velocity layer
Release samples

03 BTB_sus_mf **Samples: 74** **RAM: 4 MB**

Sustained, mezzoforte
1 velocity layer
Release samples

04 BTB_sus_f **Samples: 74** **RAM: 4 MB**

Sustained, forte
1 velocity layer
Release samples

05 BTB_sus_ff **Samples: 74** **RAM: 4 MB**

Sustained, fortissimo
1 velocity layer
Release samples

03 Perf Speed variation Range: C1–E4

01 BTB_perf-legato_slow **Samples: 929** **RAM: 58 MB**

Interval performances
Legato, slow
2 velocity layers
Release samples

99 RELEASE

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

Matrices

Matrix - LEVEL 1

L1 BTB Articulation Combi — Samples: 1493 RAM: 93 MB

Single note articulations
Staccato, portato medium, sustained with and without vibrato, medium crescendo and diminuendo 2 and 4 sec., fortepiano and sforzato, flutter tonguing normal and crescendo

Matrix switches: Horizontal: Keyswitches, C6–E6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	D#6	E6
V1	staccato	sus. vib.	dyn.med. 2s.	fp	flutter
V2	port. medium	sus. no vib.	dyn.med. 4s.	sfz	flutter cres.

L1 BTB Perf-Legato Speed — Samples: 1219 RAM: 76 MB

Interval performances
Legato slow, normal, and fast
Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal	fast

L1 BTB Perf-Repetitions Combi — Samples: 1025 RAM: 64 MB

Repetition performances
Portato
Staccato fast

Matrix switches: Vertical: Modwheel, 2 zones

	repetitions
V1	portato
V2	staccato fast

Matrix - LEVEL 2 A - Advanced

01 BTB Perf-Universal — Samples: 1933 RAM: 120 MB

Interval performances
Legato slow, normal and fast
Marcato
Speed controller

Matrix switches: Horizontal: Speed, 3 zones Vertical: Modwheel, 2 zones

	H1	H2	H3
legato	slow	normal	fast
marcato	%	%	%

02 BTB Short+Long notes

Samples: 1590 RAM: 99 MB

Single notes
Staccato, portato short and medium, portato long and sustained with and without vibrato

Matrix switches: Horizontal: Keyswitches, C6–E6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	D#6	E6
V1	staccato	port. short	port.med.	port.long vib.	sus. vib.
V2	staccato	port.short	port.med.	port.long no vib.	sus. no vib.

Matrix - LEVEL 2 B - Standard

11 BTB Perf-Legato Speed

Samples: 1219 RAM: 76 MB

Interval performances
Legato slow, normal, and fast
Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal	fast

12 BTB Short notes

Samples: 662 RAM: 41 MB

Single notes
Staccato, portato short and medium, portato long with and without vibrato

Matrix switches: Horizontal: Keyswitches, C6–E6

	C6	C#6	D6	D#6	E6
V1	staccato	port.short	port.med.	port.long vib.	port.long no vib.

13 BTB Long notes - All

Samples: 407 RAM: 25 MB

Single notes
Sustained with and without vibrato

Matrix switches: Horizontal: Keyswitches, C6–C#6

	C6	C#6
sustained	vibrato	no vibrato

14 BTB Dynamics - Small

Samples: 555 RAM: 34 MB

Dynamics
Medium crescendo and diminuendo, 2, 3, and 4 sec.
Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C6–D6 Vertical: Modwheel, 4 zones

	C6	C#6	D6
dyn.medium	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

15 BTB Dynamics - Large

Samples: 1526 **RAM: 95 MB**

Dynamics
Light crescendo and diminuendo, 1.5 and 2 sec.
Medium crescendo and diminuendo, 2, 3, and 4 sec.
Strong crescendo and diminuendo, 4 and 6 sec.
Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C6–D6 Vertical: Modwheel, 4 zones

	C6	C#6	D6
dyn.light	1.5 sec.	2 sec.	2 sec.
dyn.medium	2 sec.	3 sec.	4 sec.
dyn.strong	4 sec.	4 sec.	6 sec.
fp/sfz/sffz	fp	sfz	sffz

16 BTB Flatter

Samples: 125 **RAM: 7 MB**

Flutter tonguing
Normal, crescendo, and normal/crescendo with Cell crossfading

Matrix switches: Horizontal: Keyswitches, C6–D6

	C6	C#6	D6
flutter	normal	crescendo	Cell XF

Matrix - LEVEL 2 C - Repetitions

31 BTB Perf-Repetitions - Combi

Samples: 1538 **RAM: 96 MB**

Repetition performances
Portato, and staccato slow and fast

Matrix switches: Horizontal: Keyswitches, C6–D6

	C6	C#6	D6
V1	portato	staccato slow	staccato fast

32 BTB Perf-Repetitions - Speed

Samples: 1538 **RAM: 96 MB**

Repetition performances
Portato, and staccato slow and fast
Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
V1	portato	staccato slow	staccato fast

33 BTB Fast-Repetitions

Samples: 666 **RAM: 41 MB**

Fast repetitions: Staccato, 9 repetitions, 150–190 BPM

Matrix switches: Horizontal: Keyswitches, C6–E6

	C6	C#6	D6	D#6	E6
speed/BPM	150	160	170	180	190

34 BTB Upbeats a1

Samples: 888 **RAM: 55 MB**

Repetitions: 1 upbeat, 80–150 BPM

Matrix switches: Horizontal: Keyswitches, C6–G6

	C6	C#6	D6	D#6	E6	F6	F#6	G6
speed/BPM	80	90	100	110	120	130	140	150

35 BTB Upbeats a2 — Samples: 888 RAM: 55 MB

Repetitions: 2 upbeats, 80–150 BPM

Matrix switches: Horizontal: Keyswitches, C6–G6

	C6	C#6	D6	D#6	E6	F6	F#6	G6
speed/BPM	80	90	100	110	120	130	140	150

36 BTB Upbeats a3 — Samples: 888 RAM: 55 MB

Repetitions: 3 upbeats, 80–150 BPM

Matrix switches: Horizontal: Keyswitches, C6–G6

	C6	C#6	D6	D#6	E6	F6	F#6	G6
speed/BPM	80	90	100	110	120	130	140	150

37 BTB Upbeats all — Samples: 2664 RAM: 166 MB

Repetitions: 1–3 upbeats, 80–150 BPM

Matrix switches: Horizontal: Keyswitches, C6–G6 Vertical: Modwheel, 3 zones

	C6	C#6	D6	D#6	E6	F6	F#6	G6
1 upbeat	80	90	100	110	120	130	140	150
2 upbeats	80	90	100	110	120	130	140	150
3 upbeats	80	90	100	110	120	130	140	150

Matrix - LEVEL 2 D - Scale+Phrase

41 BTB_Grace notes - All — Samples: 545 RAM: 34 MB

Grace notes, minor and major 2nd
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C6–C#6

	C6	C#6
interval	min. 2nd	maj. 2nd

Matrix - LEVEL 2 E - Keyswitch Vel

71 BTB Portato - cre9 — Samples: 171 RAM: 10 MB

Portato notes: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–G#6

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

72 BTB Staccato - cre9 — Samples: 171 RAM: 10 MB

Staccato notes: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–G#6

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

73 BTB Combi - cre9

Samples: 342 **RAM: 21 MB**

Portato and staccato: Crescendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–G#6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

74 BTB Portato - dim9

Samples: 171 **RAM: 10 MB**

Portato notes: Diminuendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–G#6

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

75 BTB Staccato - dim9

Samples: 171 **RAM: 10 MB**

Staccato notes: Diminuendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–G#6

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

76 BTB Combi - dim9

Samples: 342 **RAM: 21 MB**

Portato and staccato: Diminuendo, keyswitch velocity
Keyswitches control 9 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–G#6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

Presets

BTB VSL Preset Level 1 **Samples: 3552 RAM: 222 MB**

L1 BTB Perf-Legato Speed
L1 BTB Articulation Combi
L1 BTB Perf-Repetitions Combi
Preset keyswitches: C7–D7

BTB VSL Preset Level 2 **Samples: 5094 RAM: 318 MB**

01 BTB Perf-Universal
01 BTB Perf-Universal
L1 BTB Articulation Combi
31 BTB Perf-Repetitions - Combi
73 BTB Combi - cre9
Preset keyswitches: C7–E7